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1-1-1997

## Nutrition and Aging

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Chezem, JoCarol; Mason, April C.; and Wallmann, Harvey, "Nutrition and Aging" (1997). *Historical Documents of the Purdue Cooperative Extension Service*. Paper 495.  
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# NUTRITION & AGING

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In the United States today, about 11% of the population is over 65 years of age; by the year 2030, this number will increase to 20%. As the number of senior citizens grows, so does the interest in finding out more about the process of aging, and how aging affects nutritional needs.

## The Aging Body

Many changes take place as the body ages. These changes usually are a normal part of aging and not a sign of illness or disease.

Sensory changes occurring in the mouth are common as people get older. A diminished sense of taste and smell may make food less appealing. Less saliva is made as well; this can cause problems with chewing and swallowing. Tooth loss or poorly fitted dentures also can cause trouble with chewing.

People who have trouble chewing should first have a thorough dental check-up. Until dental problems are corrected, eating a wide variety of easy-to-chew foods will provide needed nutrients. Choose from the following:

### 1. Meat and protein foods:

eggs, cottage cheese, cheese,  
ground meat, tuna, peanut butter

### 2. Grain products:

bread, cooked cereal, muffins

### 3. Milk products:

yogurt, milkshakes, milk, custard

### 4. Fruits:

juices, bananas, canned fruit, chopped fruits

### 5. Vegetables: chopped raw or cooked vegetables

If dry mouth causes difficulty in swallowing, drinking liquid or eating moist foods will help. Moisten foods by:

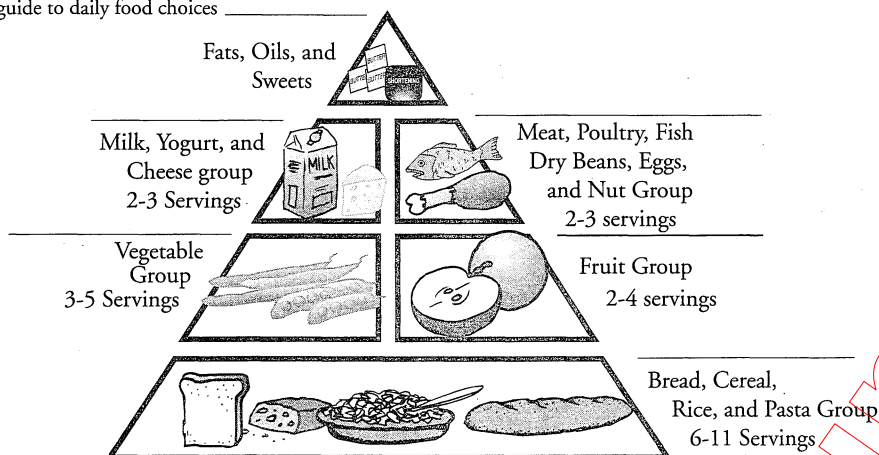
1. Using gravy, broth, sauces, or syrups to moisten food.
2. Dunking foods in coffee, tea, milk, or other beverages.
3. Taking a swallow of beverage with each bite of food.

If food seems unappealing due to a decrease in the body's ability to taste or smell, the following ideas may help to perk up meals:

1. Flavor foods with strong flavored seasoning such as onion, garlic, oregano, or mint.
2. Use tart seasonings such as pickles, vinegar, and lemon juice to enhance flavors.
3. Marinate meats in fruit juices, wines, Italian dressing, and sweet-and-sour sauce for extra zest.
4. Use colorful garnishes to make food more appetizing.

# Food Guide Pyramid

A guide to daily food choices



The amount you eat may be more than one serving. For example, a dinner portion of spaghetti would count as two or three servings of pasta.

## What counts as one serving?

### Breads, Cereals, Rice, and Pasta

1 slice of bread  
1/2 cup of cooked rice or pasta  
1/2 cup of cooked cereal  
1 ounce of ready-to-eat cereal

### Vegetables

1/2 cup of chopped, raw or cooked vegetables  
1 cup of raw leafy vegetables

### Fruits

1 medium apple, banana, orange  
3/4 cup of juice  
1/2 cup of chopped, cooked, or canned fruit

### Milk, Yogurt, and Cheese

1 cup of milk or yogurt  
1-1/2 ounces of natural cheese, 2 ounces processed cheese

### Meat, Poultry, Fish, Dry beans, Eggs, and Nuts

2 to 3 ounces of cooked lean meat, poultry or fish. Count 1/2 cup of cooked beans, 1 egg, or 2 tablespoons of peanut butter as 1 ounce of lean meat.

### Fats, Oils and Sweets

Use sparingly (limit calories from these, especially if you need to lose weight.)

As a person gets older, the body needs fewer calories (energy from food). There are two reasons for this. First, the basal metabolic rate (calories needed for involuntary work like breathing, heartbeat, and food digestion) is lowered with age. Second, people tend to be less active as they age. While the older body needs fewer calories from food, it still needs about the same amount of important nutrients (protein, vitamins, and minerals) as the younger body. By making careful food choices, a senior can get all the nutrients needed without extra calories and without nutrient supplements—but it does take planning.

The Food Guide Pyramid, shown above, simplifies planning. By design, foods containing similar nutrients are placed in the same category

or food group. Foods that contain many calories and few nutrients (candy, soda pop, potato chips, etc.) are not included in the Food Guide Pyramid, instead, they are represented as a category inserted at the top of the pyramid called

“fats, oils, and sweets.” Eating the recommended number of servings from each of the food groups and choosing a variety of foods within a food group make up the backbone of a nutritious eating style. “Other” foods may be added in moderation if desired.

Many older people do not drink all the fluids their bodies need. In younger adults, the brain keeps track of how much water is in the body, and sends out a signal, thirst, to tell the body to drink. Because the thirst signal may become weaker with age, older people need to remind themselves to drink instead of waiting until they feel thirsty. A related problem is incontinence (involuntary

*Many older people do not drink all the fluids their bodies need.*



release of urine from the bladder). In seniors, incontinence is often caused by weakening of the bladder muscles. Sometimes, people cut back on liquids in hopes of avoiding an embarrassing "accident." Drinking at least 6 to 8 cups of fluid each day is important in guarding against dehydration.

With aging, the muscles that move food through the digestive tract become weaker; often this slows the passage of food through the intestines. Reduced muscle action and drinking too little fluid play a part in causing constipation. Choosing high-fiber foods (fruits, dried peas and beans, vegetables, and whole grains) and drinking plenty of fluids usually take care of constipation. Laxatives should not be used to treat constipation unless recommended by a doctor.

### **Food and Drug Interactions**

Food is essential for life; however, medications are important too. But when mixed together, foods and medicines may combine in a way that can keep important nutrients in foods from being used by the body or make drugs less effective. Because older people are the major users of both prescription and over-the-counter drugs, food and drug interactions can become a potential problem for senior citizens.

How do foods and drugs interact? Several ways are possible:

1. Some drugs interfere with the body's uptake of important nutrients. For example, antacids that contain magnesium and aluminum hydroxide may lower uptake of vitamin A in the body. Mineral oil, sometimes used as a laxative, prevents the body from absorbing the fat soluble vitamins, A, D, E, and K. For this reason, mineral oil should not be used as a laxative.
2. Some foods may interfere with the body's uptake of medicine. Dairy products interfere with the absorption of tetracycline, an antibiotic.
3. Some foods may increase the body's uptake of medicine. Taking an iron supplement along with a food rich in vitamin C (such as orange juice) will help the body absorb more iron. This is one of the few good food-drug interactions.
4. Some drugs may decrease appetite. Chemotherapy, used to treat cancer, often causes nausea, vomiting, and changes in taste sensation.
5. Some drugs may increase appetite. Insulin, steroids, and certain antihistamines can cause a person to feel hungrier than normal.
6. Alcohol should be avoided when taking any type of prescription or over-the-counter medication. When mixed with antihistamines, sleeping pills, or tranquilizers, alcohol can cause loss of consciousness. When taken with oral diabetes medicine and certain antibiotics, alcohol can cause flushing, headaches, nausea, vomiting, and chest pain. Alcohol may also dissolve the coating on time-release pills, resulting in a potentially toxic dosage.



To avoid food-drug interactions, take the following precautions:

1. Make sure your doctor knows about the drugs you take regularly or occasionally. This list should include both prescription and non-prescription drugs.
2. Read the labels and package inserts of over-the-counter drugs.
3. Follow directions. Take drugs as prescribed.
4. Don't be afraid to ask your doctor or pharmacist how the drugs might interact with your favorite foods.
5. Be sure to tell your doctor of any unusual symptoms that you notice after eating a particular food.

The importance of food and drug interaction cannot be over-emphasized. Use the doctor and pharmacist and label instructions to get the full benefit from medicine while avoiding food and drug interactions.

#### **Vitamins and Minerals**

Often, older people have problems getting the vitamins and minerals needed for good health. Below are some vitamins and minerals that are of special concern to seniors.

Vitamin D is found in liver, fish, and dairy products. Also, the body can make vitamin D when the skin is exposed to sunlight. This nutrient is needed to keep bones healthy. When the body is low in vitamin D, osteomalacia, a disease that causes softening of the bones, may occur. Because some elderly people don't go outside much, or only

go outdoors with skin covered, their bodies do not make vitamin D. For this reason it is important for seniors to eat foods rich in vitamin D.

Vitamin B-6 is another vitamin that may be low in the bodies of older people. There are a couple of reasons for this. First, the elderly may not eat enough of the foods that contain vitamin B-6: liver, beef, pork, chicken, and fish. Second, some drugs, including alcohol, interfere with the body's ability to use the vitamin B-6 in food. To make sure their bodies are getting plenty of vitamin B-6, older people should eat foods rich in vitamin B-6 and talk with their doctor about food and drug interactions.

Folic acid, a nutrient needed to make red blood cells, is the vitamin most commonly found to be low in the elderly. Seniors often avoid foods rich in folic acid such as liver and green leafy vegetables. Also, certain drugs and diseases may interfere with the uptake and use of folic acid by the body. Because low folic acid is so common, older people should make a special effort to eat plenty of foods containing this vitamin.

The media has spread the message, "Milk is not just for kids." Seniors should listen. Milk and other dairy products are good sources of calcium, a mineral needed for healthy bones. Older people, especially women, who do not get enough calcium may develop osteoporosis. This disease causes thinning of the bones; making them more brittle and more likely to break.

#### **Vitamin and Mineral Supplements**

Everyone needs vitamins and minerals to keep the body healthy. But, how much is enough? Can a senior get all the vitamins and minerals he/she needs from food? Do vitamin

*Don't be afraid  
to ask your  
doctor or  
pharmacist  
how drugs might  
interact with  
favorite foods.*

and mineral supplements give a person more energy and help in dealing with stress? If a little is good, is a lot better? Can supplements be dangerous? Read on for the answers to these commonly asked questions.

In the United States, the Recommended Dietary Allowances (RDA's) are guidelines that tell how much of each vitamin and mineral is needed daily by healthy people. The RDA's are only guidelines, not strict requirements or minimum amounts. In fact, the RDA's are set higher than most people need for a "safety factor."

A healthy senior can get all the vitamins and minerals he/she needs from foods. Eating a variety of foods and meeting (or exceeding) the recommended number of servings from each of the five food groups daily is an easy way for most elderly people to get enough vitamins and minerals. Sometimes, seniors take a vitamin and mineral supplement to try to make up for poor eating habits. A pill cannot be a substitute for healthy foods. Foods contain, along with vitamins and minerals, needed fiber, protein, carbohydrates, and fat.

Some people think vitamin and mineral supplements will give them extra energy and help them handle stress; this is not true. While vitamins help the body use the energy from foods, vitamins do not give a person energy. If an older person feels tired and run-down, a visit to the doctor, not a vitamin pill, is the preferable cause of action. Supplements may be needed during times of great physical stress; such as major surgery or severe burns, to help the body repair itself. Mental stress, on the other hand, does not increase the need for vitamins and minerals.

Even though supplements are not needed by most healthy seniors, some take a multivitamin with minerals as "insurance" to make sure they get enough vitamins and minerals each day. While this practice may not be helpful, it usually is not harmful if the supplement contains no more than 100% of the RDA for any given nutrient. No one should take a vitamin or mineral in doses larger than the RDA unless prescribed by a doctor; doing so could be harmful.



### Health Quackery

Health quackery is the sale of medical remedies that either have been tested and shown not to work or have not been tested. Each year, at least 10 billion dollars are spent on unproven medical treatments.

Seniors, looking to restore or improve their health, are a prime target for such trickery.

There are several ways to spot health fraud:

- 1. Products are advertised.**

Anytime a health product (or service) is advertised, a closer look is needed. While not all advertised health products are quackery, quacks often promote their goods on television and in print.

- 2. Treatment for a serious disease.**

Be wary—the more serious the illness, the more fake cures there are available. Serious illnesses cannot be cured by products bought by mail or over-the-counter.

- 3. The product can cure more than one illness.**

This is a con-artist's dream come true; the more medical problems the product is said to cure, the more

potential buyers (and profit) there are. There are no "magic bullets."

**4. Testimonials are used.**

Testimonials from "satisfied customers" are used to sell the product rather than using hard scientific facts.

**5. Listen to the words.**

Quacks use words like "miraculous," "amazing," and "medical breakthrough" to catch the potential buyer's attention. A true "medical breakthrough" would be reported in a journal for doctors and scientists, not advertised for sale in magazines or on television.

**6. If it sounds too good to be true, it probably is.**

At best, health fraud can steal a senior's money. At worst, it can steal a senior's health by keeping him/her from seeking timely care from a doctor and by offering products that may contain harmful substances. To avoid being the victim of health quackery, health problems should be discussed with medical professionals—M.D. (medical doctor), R.N. (registered nurse), R.D. (registered dietitian), and R. Ph. (registered pharmacist). These specialists are best qualified to answer questions and give up-to-date advice on health issues.

The senior years bring about changes in the body which may lead to poor nutritional status. Being aware of potential problems, making smart choices, and seeking medical and nutritional advice from qualified professionals can optimize the older person's health. While healthy eating habits may not guarantee a long disease-free life, good nutrition is an important factor in maintaining the health of seniors.

**For Further Information**

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